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WAYLAND, 1974:

BACKGROUND FOR LAND USE DECISIONS

League of Women Voters of Wayland

January, 1974

This publication has been prepared by the Land Use Committee of the League of Women Voters of Wayland, Massachusetts:

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FOREWORD

The Planned Development zoning bylaw to be voted on at March Town Meeting affects you. Fortunately, Wayland is a town in which there still are undeveloped areas. This means land open to decision by everyone of us. At Town Meeting, you will be asked to vote on several articles which, if adopted, would provide Wayland with multi-residence housing on some of this land.

A final text of the Planned Development bylaw is not available to the League of Women Voters at this writing, and our members have not yet reached any conclusions about it. However, the League has been studying the comprehensive topic of land use in Wayland over the past year. As a result of this research, background material has been prepared to help sort out the complex issues that will be involved in determining your vote.

Included is a series of questions and answers which outline the physical character of Wayland, its growth pattern, current uses of the land and controls on it. It discusses the possible costs to the taxpayer of varying kinds of land use, and speaks to some specific questions the voter might wish to ask concerning effects which different land uses may impose on the public facilities of the Town. In addition, the League notes some of the less tangible concerns which may arise.

The League of Women Voters is committed to the concept of citizen responsibility. If the proposed Planned Development bylaw is accepted by the Town, it should offer an opportunity for participation to fulfill each individual's responsibility to join in shaping the community and protecting its resources. Therefore, the League considers it imperative for voters to assure themselves that provision is made in the proposed bylaw for adequate citizen review and reaction.

The Town will change. How rapidly, in what direction, who will ultimately control the changes - these are the issues to be decided. As a voter, you can participate in these decisions. The League urges you to do so. We hope you will read the following pages and that they will help you in reaching your decisions.

Barbara Leith

Barbara Leith, President
League of Women Voters of Wayland

December 15, 1973

SOME PARTICULARS

Although the final texts of the Articles described below are not available at the time of this writing, the Planning Board has made public the basic concepts of the Articles it will propose.

1. Planned Development Zoning Bylaw

.2/3 vote of Town Meeting plus approval of state Attorney General required for adoption

.no requirement that any tract must be used for Planned Development

.amendment enables Planned Development to be requested as an alternate form of residential use

.each tract for which Planned Development is recommended by the Planning Board will be presented to a Regular Town Meeting for acceptance by 2/3 vote

.tracts of 125 acres or more are eligible for consideration

.70 percent of any site is to be retained in open space

.height limitation of 35 feet on buildings (no more than 3 stories)

.low density population limitations specifically provided by controlling dwelling units per buildable acre

.multi-family structures limited to condominiums (i.e., multi-housing structures in which each unit plus part of the "common space" used by all residents - parking and recreation areas, etc. - is owned individually just as a house and land)

.staged construction (limitation on the number of units to be built in any one period)

.required analyses of the impact of any Planned Development on the physical characteristics of the land; on environmental quality and on public facilities of Town

.issuance of a Planned Development Permit by the Zoning Board of Appeals after Final Development Plan is recommended by Planning Board

2. Mainstone Farm Rezoning for Planned Development

.can come to a vote only if Planned Development bylaw is adopted

.2/3 vote of Town Meeting required for acceptance

3. Commercial Uses Amendment to Planned Development Bylaw

- can come to a vote only if Planned Development bylaw is adopted
- allows limited shopping facilities within a Planned Development
- requires 2/3 vote of Town Meeting for acceptance

NOTE : The above are incomplete summaries of the Articles. The Planning Board will hold public meetings prior to the mailing of the Town Meeting Warrant to discuss complete details of the Articles.

ERRATUM: No. 2 -- Rezoning of Mainstone Farm will be presented by the owners of Mainstone Farm.

THE BACKGROUND

Why is Wayland Considering a Zoning Change Now?

Many residents in Town would probably agree that Wayland is an attractive town with a semi-rural character comparatively unburdened by the difficulties of the urban core. It is part of the Boston Metropolitan Area conveniently close to many centers of employment. Thus it faces unremitting pressure for increased population growth.

In addition, Wayland has within it several large property holdings. Economic pressures have made it increasingly difficult to keep these areas within the ownership of individual families. Although current financial uncertainties have severely restricted new home construction, it is quite clear that large tracts of land in Wayland are highly marketable for residential development.

Concurrently, changes in living patterns, economic conditions and the varieties of housing being designed have all led to a market for different kinds of homes.

At the March, 1974 Town Meeting, the Planning Board will propose a Planned Development zoning bylaw which will if adopted, permit multi-family dwellings as an alternate use of large tracts of residential land.

How Has Land Use Changed Over the Years in Wayland?

One way of seeing the change is by looking at how four categories of land usage have shifted from 1951 to 1972. Figures are from a November, 1973 report by the Department of Natural Resources of the Commonwealth of Massachusetts. (Please note that acreage totals are not the same due to statistical variation.)

Type of Usage	Acres 1951	Acres 1972	Change
Forest	4604	4318	- 286
Agricultural or open land	3011	1319	-1692
Wetland	1565	1527	- 38
Urban (developed)	988	2724	+1736

It is readily seen that much of the development of Wayland has taken place on agricultural or open lands. Serious consideration of a continuation of this trend and its impact on the remaining open or agricultural land is vital.

How Has Wayland's Population Grown in the Recent Past?

Year	Total Population	School Enrollment as of Oct. 1	Change Population	Change School Enrollment
1960	10,444	2,558		
1961	10,965	2,798	+521	+240
1962	11,445	2,972	+480	+174
1963	11,782	3,149	+337	+177
1964	12,091	3,239	+309	+ 90
1965	12,192	3,391	+101	+152
1966	12,833	3,603	+641	+212
1967	13,319	3,750	+486	+147
1968	13,554	3,783	+233	+ 33
1969	13,520	3,876	- 34	+ 93
1970	13,588	4,066	+ 68	+190
1971	13,848	4,014	+260	- 52
1972	13,880	3,892	+ 32	-122

Population figures from official Town office data.
School enrollments from Annual Reports.

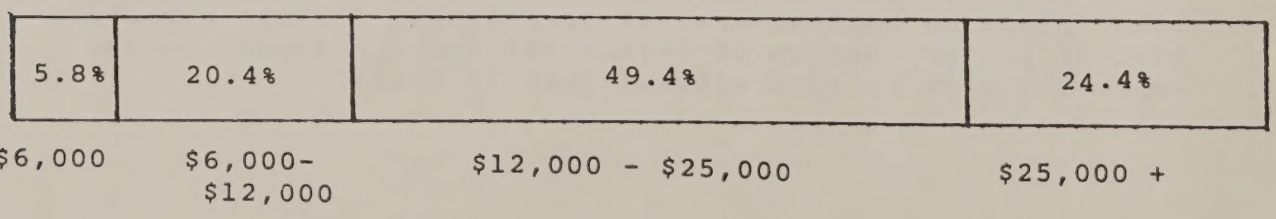
Note that as many as 641 people were absorbed into the Town in one year (1966); the school population is presently falling; total increase for 1972 is very small.

What is the Comparison of Age Groups in the Population Between 1960 and 1970?

Age Group	Percentage in Population 1960	1970
Under 5	14.2%	8.7%
5 - 14	23.4%	25.4%
14 - 21	18.5%	11.3%
21 - 65	38.0%	48.6%
Over 65	5.9%	6.0%

Source: U.S. Census 1960, 1970

What is the Family Income Distribution in Wayland?



Source U.S. Census 1970

What is the Dominant Physical Characteristic of Wayland?

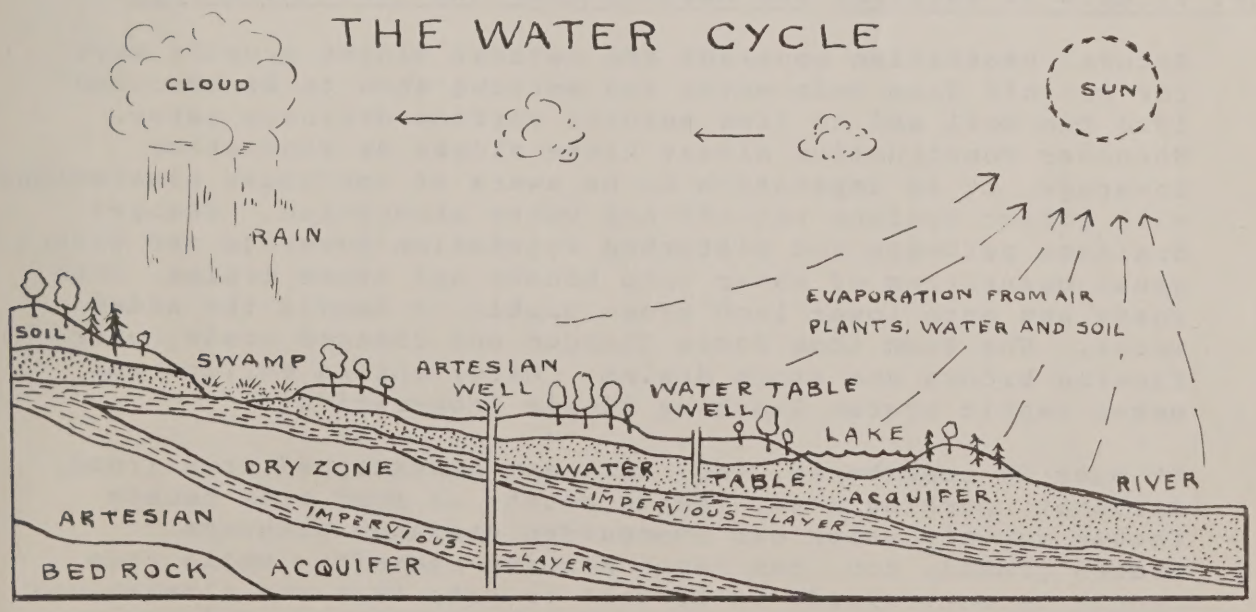
Wayland is wet. Over 20 percent of the Town is water or wetland. The Sudbury River and its broad flood plain dominate much of the western half of the town. There are eight brooks; Trout, Hazel, Mill, Pine, Hayward, Wash, Snake and Dudley. Great Ponds (those over 10 acres) include Dudley, Heard, Baldwin and Lake Cochituate, part of which lies in Wayland. In addition, scattered about in the higher part of town are many intermittent waterways, numerous swamps and some bogs and meadows.

How Does the Presence of Wetland Affect the Use of Land?

This becomes a barrier to construction because of the inability of wetland to be used for septic systems. Wetland cannot provide sites for leaching fields where there is aerated, unsaturated soil to a depth of several feet. Such soil is needed so that septic tank effluent can be purified before it reaches the ground.

What Other Physical Feature is of Vital Importance to Wayland?

The buried pre-glacial valley in the western edge of the Town is a hidden geologic feature of enormous importance. In it lie our acquifers - the massive beds of glacial soil which store large volumes of ground water which flow to the wells that are the source of the Town's water.



The illustration above shows the water cycle as it works in Wayland. This system is totally dependent on water soaking

into the ground from various sources and gradually reaching our acquifers to be pumped for use. When upland areas are developed, this causes a greater fraction of rain to run-off over the ground surface and reduces the amount of water going into the soil to recharge our acquifers. It is, therefore, crucial to the maintenance of the water supply to control the amount of development on receptive upland soils.

Is our Water Supply Sufficient for our Needs?

Wayland is fortunate in having an abundance of excellent drinking water. The Water Commission estimates that the town wells can supply up to 18,000 people based on current equipment and usage. With more pumps and larger mains, the present wells could supply up to 21,000 people.

How do Current Zoning Restrictions Protect Our Water Resources?

By controlling the number of housing units per acre and the percentage of a lot which may be covered by any building, Wayland's current zoning bylaws help to preserve the soil water storage capacity.

In addition, Flood Plain Zoning and Watershed Protection zoning help to keep development out of wetlands. The Massachusetts Wetlands Protection Act includes control of wetlands not covered by town zoning bylaws, but is less effective than zoning.

What Effects of Rainfall and Melting Snow Must Be Considered?

Natural vegetation coverage and natural slopes provide ways for run-off from rain water and melting snow to be absorbed into the soil and to find natural surface drainage paths. Whenever construction alters these slopes or vegetation coverage, it is imperative to be aware of how these alterations will affect surface run-off and water absorption. Changed drainage pathways and disturbed vegetation coverage can divert great quantities of water into brooks and storm drains, onto roads and onto lower land areas unable to handle the added water. The Town then faces flooded and damaged roads, overflowing brooks and storm drains. Water enters cellars and makes septic system leaching fields inoperative.

It must be remembered, too, that any blacktopped area (road, driveway, parking area, tennis court) or roof area causes faster run-off which can overburden drainage pathways. Frozen ground, too, can cause massive run-off. While this cannot be controlled, it is well to note that the alterations to the land mentioned here will intensify this problem.

What Other Natural Features Have a Bearing on Suitability of Land for Development?

Development on excessively steep slopes produces eroding soil and dangerous road conditions.

Bedrock outcroppings warn that soil in the area may be too shallow for septic systems.

The value of productive agricultural lands must be carefully considered when development on them is proposed.

The scenic value of some parts of Wayland is so great that it deserves special consideration.

Where Does Wayland Get its Authority to Control Land Use?

The Commonwealth of Massachusetts, like other states, has delegated most land use powers to the towns and cities through enabling legislation granting specified powers to various Town bodies.

What Agencies of Town Government Have State-delegated Power to Influence the Way Land is Used in Wayland?

The main agencies are:

Planning Board	6 elected members	4 year term
Zoning Board of Appeals	3 members appointed by Selectmen	3 year term
Board of Health	3 elected members	3 year term
Conservation Commission	7 members appointed 5 by Selectmen 1 by Water Commission 1 by Planning Board	3 year term
Road Commissioners	3 elected members	3 year term

What is the Function of the Planning Board?

1. Studies needs of the Town and develops plans for the future. May make recommendations to the Selectmen and to Town Meeting.

2. Proposes zoning bylaws that must be approved by a 2/3 vote of Town Meeting and the state Attorney General.

3. Develops and administers sub-division controls which apply to open land when it is divided into two or more lots that do not front on existing public roads.

What is the Function of the Zoning Board of Appeals?

1. Grants variances from existing zoning bylaws under special conditions.

2. Approves site plans for all construction in business, light industry and limited commercial districts.

3. Empowered, since 1967, to issue permits for cluster developments providing certain conditions were met. (No permit for this has ever been issued.)

4. Rules on requests to build on or alter the land in the Flood Plain District and Watershed Protection District.

5. Issues Special Permits for certain uses of building within single residence zones including professional offices and customary home occupations.

What is the Present Zoning Picture in Wayland?

At the 1934 Town Meeting, three types of district were established:

1 - single residence
2 - business
3 - light manufacturing

In 1958 a Flood Plain District was established to control building in or use of this area.

In 1967 a Watershed Protection Act was voted by the Town to control building in or use of water resource areas.

In 1972 Housing for the Elderly of Low Income was authorized, each parcel to be voted on at Town Meeting.

Single residence districts: Four types of zones for single residence were inacted in 1953 and specify 20,000 square feet, 30,000 square feet, 40,000 square feet, and 60,000 square feet, lots for specific areas of the Town with exception of those lots previously recorded.

A Flexible Plan Development amendment (cluster zoning) was enacted in 1967. It has never been used. This bylaw allows ten or more acres in the 40,000 and 60,000 square feet areas to be developed in smaller than standard lots providing there is open space and no greater density of houses than the original zoning allowed.

How Does the Board of Health Influence the Way Land is Used?

The Board of Health enforces state and local sanitary codes which include responsibility for septic systems in Wayland. No building permit can be issued without the Board's approval of the design of the septic system. Before giving its approval, the Board checks the character of the soil and the wetness of the land. The Board also sets sanitation standards for the use of the dump.

By state statute, the Board of Health is empowered to enact local sanitary regulations which can exceed state minimums.

How Can This Board Control Large Capacity Septic Systems Such as Those Which Might be Needed in Planned Developments?

Large septic systems (those of over 2,000 gallons capacity) must be approved by both the Massachusetts Department of Public Health and by the Wayland Board of Health. As noted above, the local Board can enact regulations setting higher standards than those set by the state.

What Are the Land Use Responsibilities of the Conservation Commission?

The Commission is concerned with protecting natural resources, and conserving open space. It developed the Watershed Protection Zoning District as one way to protect water resources. In 1966 the Commission recommended a Conservation Master Plan as a guide to preserving a variety of open spaces and for protection of natural resources from future septage contamination, pollution and drainage problems.

As an advisory body primarily, the Commission may make suggestions to other Town agencies and to Town Meeting. For example, Funds for each parcel of conservation land negotiated for purchase must be approved by a 2/3 vote at Town Meeting. The Commission can apply for federal and state reimbursement to help the town acquire such land.

The Conservation Commission is also empowered by the state to enforce the Massachusetts Wetlands Protection Act of 1972 which regulates how such land may be developed. This is to be done in conjunction with the state Department of Natural Resources.

How are the Road Commissioners Involved in Land Use?

The Road Commissioners have general responsibility for reconstruction, drainage and maintenance on all town-accepted roads. They also have responsibility for town landfill (dump) operation.

What State Agencies Influence How Land is Used in Wayland?

The Massachusetts Department of Public Works affects land by actions on state roadways passing through town. The Metropolitan District Commission which owns watershed land and acqueducts crossing a town can become involved with local land use decisions. The Department of Natural Resources and the Department of Public Health work through and back up local Conservation Commissions and Boards of Health.

How Can Recent State Actions Modify Local Land Use Control?

In 1969, as low and moderate income housing became increasingly difficult to find, the state passed a law giving the state Housing Appeals Committee power to overrule local Zoning Boards of Appeal when eligible organizations propose to build subsidized low or moderate income housing in specified kinds of communities.

Can We Find Out in Advance Whether Alternative Uses of the Land Will Add to the Tax Burden or Bring More to the Town in Tax Revenue Than They Require in Services?

It is, of course, extremely difficult to predict future costs accurately in today's economy. Past experience shows that school costs consume more than half of all tax revenues. Therefore, estimates of future school-age population become crucial in any determination of future tax expenditures. But, when details of development possibilities are not known, and in one case there is no prior experience to evaluate its potential population age-mix, predictions become even more hazardous.

However, in order to give some approximation of the impact on taxes of alternative development possibilities, the per dwelling unit costs and revenues to the Town must be estimated. These estimates are detailed below based on figures available to the League and on certain assumptions for multi-family units also explained below. These assumptions may be subject to considerable refinement when details of Planned Development are made known. The method of determining comparative costs would remain the same whatever the figures used might be.

Explanation of Figures Used and Assumptions made:

Population

Single-family dwellings: based on official Town office data on population of the last 100 houses built in Wayland; that is, total of 5 persons including 2 school-age children.

Multi-family dwellings: based on either of the following assumptions:

1. Total of 4 persons per dwelling unit including 2 school-age children.

2. Total of two adults per dwelling unit.

Revenues

Price of single-family residence in 60,000 square foot zone: $90,000.00 based on current land and construction costs and data from last 100 houses built in Wayland. This figure represents a conservative minimum for future homes which might occupy such sites.

Price of multi-family dwelling unit: $60,000.00 based on current land and construction costs for 2 bedroom units of high-quality construction. This would appear to be a conservative estimate of future price.

Tax Rate: the current real estate rate is $165 per thousand with one-quarter market-value assessment.

Costs

School: Average 1973/74 budget per pupil expenditure of $1300 (rounded off from $1272) includes all expenses of operation plus transportation. The figure does not reflect any state or federal reimbursement.* It may not be totally reflective of variable and fixed operating costs. Source: Wayland School Department.

Per Capita Municipal Services: Official Town office figure of $100 per capita for operating costs for Town services.

Analysis of Estimated Revenue From a Single-family House Constructed on 60,000 Square Foot Lot

Revenue			
Assessed valuation			
1/4 $90,000 market value	$22,500		
Tax rate of $165 per thousand	x 165		
Total Revenue		$3,712.50	
Costs			
Total Population			
5 @ $100 per capita	$ 500		
School-age children			
2 @ $1,300 per child	2,600		
Total Cost		$3,100.00	
Estimated Net Revenue Per House			$612.50

Analysis of Estimated Revenue From Multi-Family Dwelling Units

Revenue			
Assessed valuation			
1/4 $60,000 market value	$15,000		
Tax rate per thousand	x 165		
Total Revenue		$2,475.00	
Costs			
1. Total Population			
4 @ $100 per capita	$ 400		
School-age children			
2 @ $1,300 per child	2,600		
Total Cost		$3,000.00	
Estimated Net Revenue			-$525.00
2. Total Population			
2 @ $100 per capita	$ 200		
Total Cost		$ 200.00	
Estimated Net Revenue Per Dwelling Unit			$2275.00

* Does not include debt retirement.

Possible capital costs of schools, fire or police stations, and so forth, plus maintenance costs for added roads and open space for which the Town might assume responsibility, could change cost figures. It should be noted that an additional school plant might or might not be needed depending on the number of children entering the system at any given time and the capacity of the system to absorb them at that time.

Future needs for capital expenditure cannot be determined since there is no reliable way of predicting how many families with children might move into condominium units. Each voter's "guesstimate" of family composition in a condominium development in Wayland will give a figure indicating estimated tax return to the Town for the total number of units to be built.

What Would It Cost the Taxpayer if a Large Tract of Land Were to be Purchased for Conservation Purposes?

Based on official Town office figures, the cost of borrowing money for a conservation purchase at an annual interest rate of six percent over a ten year period adds twelve cents per thousand dollars to the tax rate for each $50,000 borrowed. For instance, the cost per year to the taxpayer for a $1,000,000 purchase would be averaged at a tax rate of $2.40 per thousand for ten years. It must be remembered that when land is purchased for conservation, it is removed from the tax rolls.

N.B. Please bear in mind that these figures are not fixed but rather arbitrary figures picked for demonstration purposes.

PUBLIC FACILITIES

In Evaluating the Proposed Zoning Bylaw, What Concerns Should the Town Have as to the Impact on Public Facilities in Wayland?

1. Roads: Will current roads have to be widened and walkways added? Where will access roads go? Who will maintain roads within the development - town or owners? What will the financial impact to the town be for adding and maintaining roads?

2. Traffic: What major thoroughfares will be affected by traffic? Are these roads capable of absorbing projected increases in traffic? What safety problems might arise for autos, walkers, school busses?

3. Schools: What is the number of additional school age children? Will they be elementary, junior high or high school age? What capital costs will be required - e.g. new buildings or additions ? What will additional operating costs be - e.g. additional teacher salaries, supplies, books, busses? What is the projected timing for the completion of the whole project - one year, two years, five years?

4. Water Supply: Can current water facilities provide adequate water with sufficient pressure for the size development contemplated? Will it lessen the amount or pressure for current residents?

5. Public Safety: Will additional police and fire protection be required? What is the estimate of capital costs for buildings, vehicles, fire engines etc. What will be the estimated increase in operating costs - salaries for additional personnel, operation and maintenance of equipment?

6. Solid Waste Disposal: Can the present dump provide adequate space for solid waste disposal? Will new equipment be required? Will more personnel be needed at the dump?

7. Recreation: Will additional recreational facilities be needed? What kinds? For adults or children? Would recreational facilities within the development be open to all townspeople?

8. Utilities - Electricity, gas, telephone: Can the public utility companies provide service to the new units without diminishing the service now available to current residents?

9. Shopping and Other Commercial Facilities: Will the town have sufficient shopping facilities; office space for doctors, dentists, lawyers etc.? Should a development contain some commercial establishments within it - e.g.

pharmacy, grocery, dry cleaner, professional offices? Would commercial and professional facilities within the development increase or decrease the amount of traffic in and out of the area?

10. Parking and Garage: Will there be adequate parking and garage spaces provided for residents of the development as well as visitors and users of commercial and professional establishments within the development?

11. Transportation: Would a development make some kind of local public transportation possible or even essential?

Many persons in Wayland have, at one time or another, expressed certain feelings about the Town and how they envision its future. Thus, in a personal way, many citizens will think about the social impact of a major development on the Town. Maybe a development will lead the town in directions they desire; maybe it won't. In some instances it may not bother residents one way or the other.

In Considering a Particular Plan, What Areas of Social Impact Are Important?

Population mix: What potential effect might there be on the population in terms of families with children, older couples, widows or widowers, young couples, single persons? Will less well-off families be able to live in the Town? Will more well-off people choose to live here? Will a larger proportion of people without school-age children change the attitude of the Town toward education costs?

Population density: Does the plan provide for the possibility of more people living on a given area than if the zoning remained unchanged? Does it provide for fewer? The same? What are the effects of these changes?

Control through design factors: Should units be limited in bedroom number to discourage families with children? Should the developer be required to include certain number of one-floor units that would appeal to older inhabitants for whom stairs of any kind would be difficult? Should units be designed to encourage single people to move to Wayland?

Town government: Will a significant increase in population make Wayland's current form of Town Meeting government unworkable? What changes may be required in the way Town services are organized?

Character of the Town: How will a proposed land-use plan affect the way Wayland looks? Will it remove any scenic areas along roadways? Will it change the semi-rural atmosphere of Wayland? Will it protect the natural landscape and any areas of importance for public recreational use?

Private property rights: Does a proposal consider both the needs of the Town and the market and financial considerations which affect a developer?

Neighboring Town Relationships: Wayland borders on many towns: Lincoln, Sudbury, Framingham, Natick, Weston, Decisions made by Wayland could have an impact on these other towns.

What are Some of the Ramifications of a Development on the Towns Around Wayland?

If the proposed parcel of land to be developed touches or is near the border of a neighboring town, does Wayland need to consider the impact on the people who live nearby? Should

the concerns of immediate neighbors, even though they live in an adjoining Town, be a factor? Is it desirable to have similar kinds of land use on each side of a border? Should Wayland be concerned about the possibility of creating additional traffic in a neighboring town through development of a border area?

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